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ABSTRACT

A project was undertaken to develop a continuous, competency-based line of vocational training in business and office education programs at the secondary and postsecondary levels that would prepare students for entry-level employment in business and office occupations. To accomplish this goal representatives from 15 South Carolina high schools--2 secondary level vocational centers, the school district of Greenville County, South Carolina, and secretarial science department instructors from the postsecondary level program of Greenville Technical College--met in task force committee meetings and workshops to coordinate similar secondary and postsecondary programs and to laterally articulate similar programs at the secondary level. After identifying major objectives for job competency and performances to obtain the objectives, task force members developed criterion-referenced measures of competence as a guide for articulating the various programs. Also developed during the project was an articulated, performance-based instruction objectives guide for business and office education. Included in the guide were learning modules in the following subject areas: typewriting, shorthand, accounting, office procedures, and business English. (MN)

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FINAL DOCUMENT
FOR ARTICULATION OF BUSINESS AND OFFICE EDUCATION

Project No. 81-1708
Contract No. ARC 211-B

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ARTICULATED, PERFORMANCED-BASED INSTRUCTION OBJECTIVES GUIDE FOR BUSINESS AND OFFICE EDUCATION

February 28, 1982

Occupational Education Articulation Project
Funded by
SOUTH CAROLINA APPALACHIAN COUNCIL OF GOVERNMENTS

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THE SCHOOL DISTRICT OF GREENVILLE COUNTY

ARTICULATED, PERFORMANCE-BASED CURRICULUM GUIDE

BUSINESS AND OFFICE EDUCATION

DR. J. FLOYD HALL, SUPERINTENDENT

THE SCHOOL DISTRICT OF GREENVILLE COUNTY
GREENVILLE, SOUTH CAROLINA

1982

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The professional interest of Miss Joanne Montague of The School District of Greenville County in editing this guide is appreciated.

ABSTRACT

Title of Project: Occupational Education Articulation Program

Project Coordinator: Wm. Edward Henderson, Jr.

Contracting Agency: The School District of Greenville County
301 Camperdown Way
P. O. Box 2848
Greenville, South Carolina 29602

Program Period: March 1, 1981, through February 28, 1982

PURPOSE: To develop a continuous line of vocational training in similar Business and Office Education programs so that students may continue their education at the secondary and post-secondary levels without loss of time or waste of effort in repeating tasks that have been mastered previously.

To provide a system where teachers can cooperate effectively in providing a continuous occupational development program and where the level and type of training that leads to entry-level employment skills will be clear to students, teachers, other educators, and employers.

METHOD: Business and Office Education teacher representatives from 15 high schools and 2 vocational education centers of the secondary level program, The School District of Greenville County, and Secretarial Science Department instructors from the post-secondary level program of Greenville Technical College were brought together in Task Force Committee meetings and workshops to survey very similar office occupations courses of training to identify possible overlap or gaps as students continued business and office education training from the secondary level to the post-secondary level. In addition, there was interest in lateral articulation of similar programs at the secondary level. Articulated, performance-based (competency-based) instruction objectives guides were developed by the Task Force Committee to facilitate articulation. The Task Force Committee on Business and Office Education, by the task analysis process, identified the essential competencies for Typewriting, Shorthand, Accounting, Office Procedures, and Business English for a student to continue secretarial training or for initial entry into the labor market in an office occupations related field. Major objectives for job competency were stated, performances to obtain the objectives were identified and placed in sequential order, instruction time was estimated, and performance standards were stated. Finally, outcome-referenced (criterion-referenced) measures of competence were developed as a guide in articulating.

RESULTS: As a result of the project, the final product, Articulated, Perforamnce-based Instruction Objectives Guide for Business and Office Education, was developed and included, as its components, articulated guides for Typewriting, Shorthand, Accounting, Office Procedures, and Business English. The articulation guide, however, is not a final product since it must be field trial tested and revised. Modifications and improvements to the Guide are expected since the process of education must be continually reviewed to ensure that objectives are valid and are being met as best they can be met under given conditions.

A Policies and Procedures Guide was developed to aid continuing and future articulation activities. Two workshop guides were developed to assist administrators interested in articulating programs or developing performance-based instruction. The guides contained how-to-do-it "handout" sections to help teacher participants in writing performance-based materials.

Final Document

Project No. 81-1708
Contract No. ARC 211-B

Title of Report
ARTICULATED, PERFORMANCE-BASED INSTRUCTION OBJECTIVES
GUIDE FOR BUSINESS AND OFFICE EDUCATION

Subtitles of Document

Articulated, Performance-based Instruction Guide for Typewriting
Articulated, Performance-based Instruction Guide for Shorthand
Articulated, Performance-based Instruction Guide for Accounting
Articulated, Performance-based Instruction Guide for Office Procedures
Articulated, Performance-based Instruction Guide for Business English

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February, 1982

Funded by

South Carolina Appalachian Council of Governments

PREFACE

The Articulated, Performance-based Instruction Objectives Guide for Business and Office Education is designed for reference use in the articulation of very similar vocational training programs at the secondary level, The School District of Greenville County, and the post-secondary level, Greenville Technical College, and to encourage performance-based (competency-based) instruction and outcome-referenced (criterion-referenced) evaluation in vocational training.

The scope of the initial Guide includes those courses in which both institutions agreed there were commonalities in instructional content.

The development of the Guide was compacted into a one-year period due to the project beginning at a date later than initially planned and due to the possibility that 1982-83 federal funding cutbacks might affect the program. The compacting of the development time emphasized the need to limit the scope of the project to those courses where very similar vocational training was occurring and where there was tentative agreement that students continuing their training beyond the secondary level could exempt post-secondary training if they demonstrated competency in the performance of skills taught.

The Articulated, Performance-based Instruction Objectives Guide is based on the concept that similar vocational training programs which start from the beginning of the total occupational program often result in a duplication of instruction. To address this fact, articulation, through the vehicle of performance-based instruction, is designed to reduce the need for post-secondary level students to repeat vocational training successfully completed at the secondary level, if the smiliar training at the post-secondary level is continued within a specified time. Currently, Greenville Technical College does not conduct "Open Program" instruction and students who qualify for only the more advanced vocational training at TEC require individual counseling and instructional attention.

The articulation of vocational training between the secondary and post-secondary levels is based on several concepts:

1. Similar vocational training courses at the secondary and post-secondary levels must be standardized in content so as to be identifiable.

2. In addition to standardized performance objectives, both levels of training must require the same standards of job performance in tasks.

3. Finally, to foster validity and reliability in the articulation process, it is necessary to standardize test items and procedures in evaluating student job performance.

The standardization of performance objectives (course content) is based on the actual job tasks necessary for success in employment in the local or regional labor market. The performance standards are determined by the level of performance emphasized by employers for initial job entry level qualification. Performance standards exceeding the minimum recommendations for articulation are encouraged and will be necessary to motivate the better student. Outcome-referenced measurement and evaluation of performance must reflect agreement at both levels of instruction.

Traditionally, educators have tended to generate instructional objectives from content, working forward to an output. Trainers in industry, the military, and, more recently, in the vocational educational field, have stressed instructional objectives for a specific job, working from performance to curriculum development. The latter approach is important to ensure the validity of curriculum objectives and content.

Participants in performance-based articulation should be committed to the systems approach to vocational training which starts with a definition of the purposes of the vocational training. This definition (objectives statement) remains the criteria for evaluation throughout the course and achievement against the stated goals is the measure of success.

CONTENTS

Abstract ii

Preface v

Introduction 1

- Articulation 2
- The Articulation Program 2
- Articulation Coordinator 3
- Initial Program Objectives 3
- Putting Articulation into Action 4
- Articulation is not Without Work 4
- A System for Instruction 5
- Benefits from Articulation 6
- A Progressive Step Ahead 6

Purposes of the Articulated Instruction Guide 7

Definition of Terms 10

Executive Committee 15

Advisory Committee 15

Executive Committee Membership 16

Advisory Committee Membership 19

Business and Office Education Task Force Committee 21

Task Force Committee Membership 22

Schedule of Activities, 1981-1982 24

Summary of Participation: Task Force Committee 26

Introduction to Secondary and Post-secondary Training 27

- Secondary Level Programs of Training 28
  - Stenographic 28
  - Clerical 28
  - Accounting 28
  - Cooperative Office Education 29

Secretarial Science (post-secondary level) 30
AAS Degree Program 30
AAS Degree Program Requirements 31

Scope of the Program, First Year 32

Similar Areas of Training 33

Module Designations 34

Recommendations 35

INTRODUCTION

TO THE

OCCUPATIONAL EDUCATION ARTICULATION PROGRAM

AND THE

ARTICULATED, PERFORMANCE-BASED

INSTRUCTION OBJECTIVES GUIDE

FOR

BUSINESS AND OFFICE EDUCATION

OCCUPATIONAL EDUCATION ARTICULATION PROGRAM

INTRODUCTION

ARTICULATION

Articulation is the joining or interrelating of two or more levels of education, secondary and post-secondary or vocational and technical, in order that very similar programs form a continuous progression of sequential, unduplicated training.

Articulation provides a system whereby teachers can cooperate effectively in providing instruction to meet the needs of individual students in order that there will be no unnecessary gaps or overlap in student learning, and where the levels and types of training lead directly to entry-level employment skills.

Vocational articulation, in short, is a clear expression and joining of two similar levels of career training into a continuous sequence to benefit the students, educators, employers, and the taxpayers.

THE ARTICULATION PROGRAM

Articulation of secondary and post-secondary vocational training programs has been discussed in educational circles for many years. In recent years, articulation has become the subject of nationwide concern as well as positive effort. In South Carolina, secondary and post-secondary level vocational administrators have taken a supportive position for articulation since the mid-1970s. Vocational articulation programs now are underway in several locations in South Carolina.

The concept of articulation and the articulation program are supported fully by The School District of Greenville County and Greenville Technical College, which agreed upon statement of purpose for articulating the various vocational programs in Greenville County. Since 1976, they have been working toward this goal. Thus, this articulation program is a joint effort of The School District of Greenville County and Greenville Technical College with the purpose of developing a continuous program of vocational training so that students may continue their education without loss of time or waste of effort in repeating tasks which have been learned previously. This articulation program will help to remove unnecessary gaps or overlap in student learning which sometimes occur when the student completes a secondary level program and continues career development at the technical education level.

Articulation provides a system whereby teachers and instructors can cooperate effectively in providing a continuous occupational development program where the level and type of training that leads to entry-level employment skills will be clear to teachers and instructors, other educators, students, and employers.

In addition to the educational benefits resulting from an articulated vocational training program in Greenville County, taxpayers will benefit through a reduction in the cost that is required to train students for entry-level employment.

ARTICULATION COORDINATOR

The articulation coordinator and the articulation program are funded largely through a federal grant to The School District of Greenville County through the South Carolina Appalachian Council of Governments. The coordinator reports to the School District's Consultant for Vocational Education.

The articulation coordinator is responsible for the overall planning and sequential implementation of articulation efforts between The School District of Greenville County and Greenville Technical College. The sequential implementation is structured so that designated programs which are very similar in nature are "articulated" and evaluated, the articulation process is modified (if necessary), and other programs are brought into the articulation process.

To facilitate articulation, the coordinator works cooperatively with administrators, teachers and instructors, counselors, and job placement coordinators on both the secondary and post-secondary levels as well as with business, industry, and the general public.

The coordinator is assigned the tasks of providing leadership in planning curriculum development, articulation agreements, resource development, and evaluation of articulation.

INITIAL PROGRAM OBJECTIVES

Objective 1. Drafting and Business and Office Education courses at the secondary level and similar training at the post-secondary level were modified into performance-based modules.

Objective 2. Performance tests over each Business and Office Education and Drafting module were developed. The outcome-referenced test may include a written examination on the theory and knowledge of the area of instruction and a proficiency test of application of knowledge obtained.

Objective 3. The predictive validity of the tests over the Business and Office Education and Drafting modules is being determined in order that meaningful and accurate scores reflecting competency in the areas tested can be determined.

PUTTING ARTICULATION INTO ACTION

For initial implementation of the articulation program, Drafting and Business and Office Education were chosen as pilot programs. Drafting training articulation involves courses at four vocational education centers within the school district as well as at Greenville TEC. Business and Office Education involves courses at two vocational education centers, fifteen high schools, and Greenville TEC.

To bridge any gaps that might exist between secondary and post-secondary vocational training and to strengthen the sequence of occupational training available to students, there must be (1) contact, (2) communications, (3) coordination, (4) cooperation, (5) consolidation and, of course, (6) articulation between instructional participants at both levels of training.

Among program participants, there must be: (1) agreement on purpose, (2) trust, (3) respect, (4) a willingness to take risks, and (5) a willingness to experiment. The articulation process began with statements of support from top management of The School District of Greenville County and Greenville Technical College. Implementation of the articulation program is under way and the final step will be evaluation of program effectiveness.

Those things which were accomplished during the initial stage include:

1. Existing curriculum content in Business and Office Education and Drafting was revised into performance-based modules.

2. Scope and sequence of module instruction were established.

3. Cognitive and proficiency tests were developed.

4. "Tryout" testing of cognitive and performance tests was initiated.

Those things which can be accomplished after the initial year includes; (1) pilot implementation of performance-based modules and (2) full validation of cognitive and performance tests.

ARTICULATION IS NOT WITHOUT WORK

Articulation cannot take place without the implementation of performance-based instruction.

Performance-based instruction requires each student to master the vocational curriculum material at a level of proficiency necessary for success in entry level employment in the local labor market.

Everything in a performance-based instruction system is made public before instruction. There are no surprises for students, teachers, administrators, or employers. When the student begins a program, information is available to tell the student exactly what competencies are expected to be developed as a result of the instructional program,

how the student will be evaluated and against what standards or criteria, and how the student's competencies will be communicated to the student, to other instructors, and to future employers.

Developing performance-based instruction guides takes time and work. Program goals must be identified. Vocational training must be made more relevant to actual job tasks. The training or job environment, the equipment needed, and factors acting upon the student must be spelled out. Furthermore, outcome-referenced measures must be developed to demonstrate the student's mastery in knowledge and skill performance.

A SYSTEM FOR INSTRUCTION

A performance-based instruction system tells a student exactly what the student must learn, instructs the student in that skill or knowledge, and then tests on mastery of that specific competence.

Survey industry, business, relevant job areas and tasks, and students

Develop Training Objectives

Task Analysis

*Develop Measures of Proficiency	DESIGN COURSE CONSTRUCTION *-Identify Sequence of Activities -Select Teaching Materials -Select Presentation Methods
*Validate Measures	Conduct Empirical Testing & Evaluation

Implement Program — Revision

Schematic of the Systems Approach to Instruction. Articulation will help clarify those areas marked with an asterisk (*). The actual system may vary with the program, institution, or individual instructor.

BENEFITS FROM ARTICULATION

Articulation will enable the secondary school graduate to enter a very similar vocational training program at the technical college level and pick up with the next logical step in career development. Articulation will enable the student to continue his training beyond the knowledge and skills level already mastered so there will be a minimum of duplication in time and cost and maximum benefits in terms of knowledge and proficiencies gained from the instructional program.

Articulation should result in a more sequential vocational training opportunity. Training at the secondary and post-secondary levels should become more responsive to the needs of a rapidly changing technological community. Articulation should help improve retention of students who continue their vocational training beyond high school. Moreover, the motivation for learning and performance should be improved among these students.

The articulation process will require teachers and administrators from different schools to work closely together, will encourage cooperation between instructors, and will result in a more uniform curriculum program.

For vocational students, career and educational alternatives will be increased while training time and costs should be decreased. Vocational students should gain mastery of the competencies of their chosen occupational field and will be encouraged to continue their career education as a life-long process. Articulation will facilitate the progression of the student through training and into the work force.

As a by-product of articulation, vocational training should become more relevant to actual job tasks. Graduates should be more productive employees due to their training.

As articulation is thoroughly developed, the taxpayers of Greenville County will gain through the savings of tax dollars that result from more efficient vocational and technical training.

A PROGRESSIVE STEP AHEAD

Typical barriers to articulation such as individual education system divisions, each with its own philosophy, administrative "logistics" or the magnitude of the task of curriculum revision, have not delayed The School District of Greenville County and Greenville Technical College from recognizing the common need to work together at the instructional level as well as at the institutional level. The district and TEC are committed to developing a management system for articulation between similar secondary and post-secondary vocational training programs.

The School District of Greenville County and Greenville Technical College are committed to doing their best to meet the expanding need in Greenville County for workers proficient in vocational skills and knowledge.

PURPOSES OF THE ARTICULATED INSTRUCTION GUIDE

The articulated instruction objectives guide is expected to serve the following purposes:

1. The guide serves as the primary vehicle for the articulation of Business and Office Education subject matter in similar vocational training programs between the vocational education centers, high schools, and Greenville Technical College through use by instructors at both levels as a reference in preparing instruction.

2. The guide provides a listing of the minimum tasks that a student or worker is expected to perform in the conduct of a specific level job in the area of vocational training or work of concern.

3. The guide identifies the primary detailed instruction objectives (performance objectives) which are based upon the task listings. The tasks are listed in the sequence of complexity, with the least complex task being listed first, except where a task must be performed as a prerequisite to performance of another task.

4. The guide identifies the tasks performed (actions, steps, or sets of skills) and related technical information which must be taught and learned to accomplish each major instruction objective. The tasks performed represent the minimum skills and related information required for adequate occupational proficiency in the performance objectives.

5. The guide designates the instruction contact hours necessary to provide the required instruction, as required by appropriate educational agencies or offices and as estimated by the instructor/participants of the Occupational Education Articulation Program Task Forces and based on the time required to teach the average learner to perform the task. The time estimated is based on the essential equipment, facilities, and instructional aids required to provide the instruction, whenever the class size is limited to an acceptable number.

6. The guide identifies the performance standards to be met for occupational proficiency in the task. Performance standards used are those considered to be minimum business or industry standards. The ability to meet the listed standards of performance will be considered as qualification for instruction in the vocational program.

7. The guide provides direction in the conduct of sequential vocational competency instruction by modules or job tasks, resulting in qualification by the learner to perform limited skill specialist jobs of progressively higher skills until the program objectives is reached (i.e., file clerk to executive secretary, etc.). As the student becomes proficient in the performance of tasks in successively more complex modules, more marketable competencies are gained and may be identified as the lower level job qualifications of a specialist.

   Through this procedure, even the slower student is provided an opportunity to eventually gain sufficient skills to perform adequately as a specialist at some level in the vocational field, even if the student is unable to complete the total program of training.

   The standardized sequence of activities of the vocational instruction modules will facilitate lateral articulation between vocational education centers and high schools in the School District and will simplify vertical articulation when training is continued at Greenville Technical College and when communicating to employers.

8. The guide provides a descriptive listing of equipment required to conduct the program of vocational training. The equipment listed is considered to be the type and quantity essential for the conduct of instruction to prepare students for entry-level employment in the vocational field. It may be necessary to delay teaching some tasks involving special equipment, if that equipment is not available at all instructional sites, or to move students and equipment together as necessary to teach the skills.

9. The guide provides information about requirements or limitations that typically are involved in the performance of the task, environmental conditions, and physical demands.

10. The guide provides a list of standardized performance test items, outcome-referenced measures, to be used in the determination of vocational proficiency. As long as the specifics are not provided, the test items listed cannot be compromised easily and could serve as study guides.

11. The tasks listed in the guide are the minimum requirements for job qualification under average circumstances in a regional market. It is understood that there may be unlisted tasks that some employers may require the worker to do in the occupation when in their employment. There may be unlisted tasks, such as mental process tasks, that are not stated but that may occur and that should be considered in instruction planning or testing.

    Instructors may teach skills and related technical information other than what is shown in the guide. Provision of additional information should be limited to the students who have completed the requirements for the tasks emphasized in the instructions

guide. The change of tasks in the guide should be based on task force committee agreement to ensure lateral and vertical articulation.

12. It is expected that there will be updating and correction of items in the articulated instruction guides. Participants are to be sure that the contents are valid and consistent with business and industry requirements. Recommendations should be submitted to the Vocational Articulation Program office, which will assemble and present them to the appropriate committees for review and possible adoption.

13. Typically, the teacher/instructor should not plan to conduct instruction in a given articulated module unless the capability exists to conduct all of the instruction to meet the instruction objectives, with the result that the successful student is qualified to perform the tasks identified within the module.

14. An underlying philosophy in vocational training is that it is better to prepare the student to be fully qualified to perform all of the tasks in a limited range to training in a vocational field and be qualified at a lower job level rather than to be only familiar with a large number of task descriptions or duties and qualified to perform none of them fully. For higher levels of job qualification beyond the secondary level of vocational trainings, the student or worker is encouraged to enroll in Greenville Technical College.

15. Generally, vocational programs will include certain basic modules or courses of instruction without which the student would not be considered vocationally qualified at any level. Basic modules typically will be identified and taught early in the program sequence.

16. The articulated instruction guide provides information essential to help the vocational student who completes training at the secondary level and continues career development training at the post-secondary level in a similar program receive appropriate credit for the articulated vocational training that has been mastered at the secondary level.

DEFINITIONS OF TERMS

The following definitions of terms are applicable to the performance-based articulated instruction guides developed as products of the Articulated, Performance-Based Instruction Guide.

Behavior: The actions of a person (specifically, job or job training actions). Behavioral actions include both overt, those that can be observed, and covert, those not observable outwardly. Performance may be interchanged with behavior in the project. (See also Performance Actions).

Concept: A group of ideas that may be classed together or that are similar.

Criteria: A standard by which performance may be measured, usually considered the minimum standard.

Domain: A cluster of related jobs.

Duty: One of the distinct major activities involved in the work performed and comprising related tasks.

Evaluation: Evaluation is when comparisom is made between a measurement and a standard and judgment is passed on the comparison.

Item: A single stimulus or stimulus pattern that calls for a single response or set of responses. It is one sample of behavior or performance. The response may be simple or complex.

Job: The duties or tasks actually performed by a specified individual.

Knowledge: In this project, knowledge refers to acquired covert behavior which facilitates skills and performance, such as the theoretical information of what should be done under given circumstances, and in what order of sequence performance should occur to accomplish the objective.

Measurement: The process of determining the extent some characteristic is associated with the student.

Module: Modules in the pilot Drafting and Business and Office Education curriculum modifications in the Occuptional Education Articulation Program have been designed to

coincide secondary level training with post-secondary level similar areas of training.

Another method of developing modules might be for modules to represent an identifiable, complicated task or job area involving a number of sub-tasks such as "Electrical Systems" in Automative Mechanics.

Norm-referenced Evaluation: In norm-referenced evaluation, measures are dependent on a relative standard. Measures compare the capabilities of one student to those of other students.

Objective: (See Performance Objective) A stated desired outcome of training or the end result of the job, task, or performance actions. Objectives referred to in this project will be terminal objectives, generally representing a specific job function.

Occupational Education: An organized sequence of learning experiences consisting of vocational theory, practice, and skills taught to students on a regular or systematic basis.*

*Reference: Standards of the Delegate Assembly (Atlanta: Southern Association of Colleges and Schools, Commission on Occupational Education, December, 1972) p. 12.

Outcome-referenced Evaluation: Outcome-referenced, or criterion-referenced, measurement provides a standard of achievement for the individual as compared with specific behavioral objectives and therefore provides information about the degree of competency attained by the student.

The outcome-referenced measure is a performance or other measure based upon a performance objective, the accomplishment of which measures attainment of that objective.

Performance: Performance is used in this project to refer to a job or task which results from a set of sequential actions or steps.

Performance Actions: A series of steps, generally arranged in a sequence ordinarily followed, which when completed may result in the accomplishment of a performance objective (performance of a task).

Performance actions may be referred to as a set or sets of skills, functions, or steps. V-TEC (Vocational-Technical Education Consortium of States) catalogs generally describe performance actions in the "performance guide" of their format.

Articulated, Performance-based Instruction Guide: A comprehensive collection of performance objectives, performance actions to obtain those objectives, suggested hours for instruction (for

planning purposes), performance standards, related technical information, and outcome-referenced measures, as well as general secondary level and post-secondary level descriptions of similar courses for the purposes of aiding lateral and vertical articulation concerning the subject area.

Performance-based Instruction: Performance-based (competency-based) instruction is based on the competencies or tasks performed by on-the-job workers. Everything in a performance-based instruction system is made public beforehand. There are no surprises for student, teacher, counselor, or employer. When the student begins a program, information is available to tell the student exactly what competencies are expected to be developed as a result of the instructional program, how and against what standards or criteria the student will be evaluated, and how the student's competencies will be communicated to the student, instructors, and to employers. A performance-based instructional system tells the student exactly what the student must learn, teaches the student that skill or knowledge, and then tests on mastery of that specific competence.

Performance Objective: A statement in precise, measurable terms of a particular behavior to be exhibited by a learner under specified conditions. It possesses each of the elements or characteristics specified below:

Conditions under which the performance is to take place.

Behavior Desired or expected of the student (things to be done, the performance desired).

Standards to determine how well the performance is to be done (criteria).

Performance Test: A performance test requires the student to demonstrate (master) the desired behavior of the objective (accomplish a job-like task) under controlled conditions and according to predetermined standards. The controlled conditions allow the student to demonstrate the desired behavior and the conditions remain consistent from student to student.

Skill: Primarily, skill refers to overt, observable performance; however, it is recognized that there are covert skills required in some performances.

Step: Step refers to a task or action, generally as a sequence of steps involved in the accomplishment of a performance objective or job.

Systems Approach: The systems approach to instruction emphasizes the specification of instructional objectives, precisely controlled learning experiences to achieve the objectives, criteria for performance, and evaluative information.

Task: A task is a set of skills (set or sets of functions, actions, or steps) the student must perform to accomplish the job (training). A task may be described as a logically related set of actions necessary or required to complete the job objective. Several tasks could be referred to as a duty.

Task Analysis: Task analysis is breaking down a learning task (objective) into component tasks, each of which must be mastered as a prerequisite to mastery of the total job.

Task List: A listing of tasks (performance objectives) performed by incumbent workers (students in training) within a domain of interest (course of study).

Test: An event during which the student is asked to demonstrate some aspect of knowledge or skill is a test. It can be a single test item, but usually it consists of several items.

ORGANIZATION FOR ARTICULATION

BUSINESS & OFFICE EDUCATION

OCCUPATIONAL EDUCATION ARTICULATION PROGRAM

EXECUTIVE COMMITTEE

Because the Occupational Education Articulation Program involved important joint decisions between The School District of Greenville County and Greenville Technical College, such as student advanced credit or placement and methods of communications, it was crucial that a governing board be established to provide the necessary structure for coordinating the program through the two institutions. Consequently, an Executive Committee was established during the summer of 1980. The Committee membership as of 1981-1982 is listed on the following pages.

The Executive Committee met at regular intervals to review and discuss the Occupational Education Articulation Program activities and products and to plan the direction of future articulation activities.

OCCUPATIONAL EDUCATION ARTICULATION PROGRAM

ADVISORY COMMITTEE

An Advisory Committee was established so that representatives from the participating institutions and industry might participate in the formulation of the program. The Advisory Committee primarily functioned as a sounding board to determine completion requirements for job-entry skill training and to provide current data about industry manpower needs, new techniques, and equipment trends.

The Advisory Committee, because of its unique membership composition, was asked to make recommendations concerning the credentialing of students at the secondary level, communicating competencies between institutions or to employers, post-secondary handling of graduates of secondary articulated programs that may qualify for advanced placement, and a procedure for meaningful feedback from the post-secondary institution to the secondary institution concerning the competencies of advanced placement students.

The Executive Committee and Advisory Committee memberships for the period 1981-82 is listed on the following pages.

EXECUTIVE COMMITTEE

Occupational Education Articulation Program

Greenville County School District

Dr. J. Floyd Hall
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OCCUPATIONAL EDUCATION ARTICULATION PROGRAM
BUSINESS AND OFFICE EDUCATION
TASK FORCE COMMITTEE

Research and situational analysis indicated that the primary group involved in curriculum development efforts in the Occupational Education Articulation Program should be the local school level teachers/instructors.

The vocational and technical education teachers probably are some of the best informed persons to identify future training requirements, and trends in the vocational field at the local level, define objectives which will have to be realized and outline a syllabus of instruction, determine the order of tasks or topics in the curriculum, suggest instructional times, and describe the resources involved to accomplish the vocational training.

Occupational Education Articulation Program activities were organized around a nucleus Business and Office Education Task Force Committee of teacher representatives from the Business and Office Education programs at the vocational education centers and high schools of The School District of Greenville County from the Secretarial Science Department, Business Administrative Division, Greenville Technical College, the post-secondary participating institution.

One objective of the Task Force Committee was to revise curriculum offerings so that the courses would be structured into a sequential, competency-based program. A second purpose was to develop outcome-referenced (criterion-referenced) tests to be administered to students at the completion of their secondary level of training so they would objectively demonstrate levels of achievement. A third purpose of the Task Force Committee was to contribute to the development of a policy and procedures manual to guide continued implementation of vocational articulation and assist with further articulation activities.

The Business and Office Education Task Force Committee was designed to include 17 vocational teachers from The Greenville County School District. Each of the 15 high schools and the 2 vocational centers with Business and Office Education training programs were asked to be represented by one Business and Office Education teacher each. The Secretarial Science Department Chairman and five post-secondary instructors having input into the articulation program represented Greenville Technical College.

While the task force committee participants were the primary writers of the curriculum materials, there were, other teachers who had input into the program, and input from all Business and Office Education teachers was encouraged.

BUSINESS AND OFFICE EDUCATION

TASK FORCE COMMITTEE

SECONDARY LEVEL: Business and Office Education

Donaldson Vocational Center	Imogene Johnson
Foothills Vocational Center	Jerusha Drummond
Berea High School	Beverly Mayes, Rosemary Plumblee
Blue Ridge High School	Jennine Blair
Carolina High School	Karolyn Edwards, Leah Hamilton
Eastside High School	Inez Martin
Greenville High School	Gladys Perrin
Greer High School	Barbara Reid
Hillcrest High School	Gwen Reid
J. L. Mann High School	
Mauldin High School	Betty McWhite
Parker High School	Ruby Slater
Riverside High School	Patricia Shealy
Southside High School	Creola S. Campbell
Travelers Rest High School	Wylda Chandler, Nancy W. Hughes
Wade Hampton High School	
Woodmont High School	Willisteen Talbert

POST-SECONDARY LEVEL: Secretarial Science

Greenville Technical College, Business Division, Secretarial Science Dept.	Anita Hefner, Chairman Secretarial Science

1981-82

CALENDAR OF EVENTS

BUSINESS AND OFFICE EDUCATION

TASK FORCE COMMITTEE

1981-82 Calendar of Events-Production

BUSINESS AND OFFICE EDUCATION TASK FORCE COMMITTEE

	Program Description	Task Listing (Objectives)*	Breakdown of Tasks Performed+	Performance Standards+	Outcome-Referenced Measurement+
MAY	Workshop #1 Committee begins writing descriptions	Workshop #1 (Started)	Workshop #1		
JUNE	Committee Review	Committee Lists Major Objections	Committee Begins to Breakdown Task Listing		
JULY	Completed	Committee Review	Tasks described for each performance	Start Developed jointly with Task Performed	
AUGUST		Completed	Committee Review	Committee Review	
SEPTEMBER	Reviewed by Executive Committee	Reviewed by Executive Committee	Completed	Completed	
OCTOBER	Revisions Draft	Revisions Draft			Workshop #2 Start Committee Develops
NOVEMBER			Draft Rewrite	Draft Rewrite	Draft, Credentialing Instrument Developed
DECEMBER			Reviewed by Executive Committee	Reviewed by Executive Committee	Reviewed Executive Committee
JANUARY 1982	Final Revisions and Reproduction	Final Revisions and Reproduction	Final Revisions and Reproduction	Final Revisions and Reproduction	Final Revisions and Reproduction
FEBRUARY	Print & Distribute ------	Print & Distribute ------	Print & Distribute ------	Print & Distribute ------	Print & Distribute ------

* Match the performance and the conditions of the measurement with those of the objective.
+ State a performance standard for each task action in the breakdown of tasks performed.

1981-1982 Calendar of Events Meetings — ARTICULATION PROGRAM

	Executive Committee	Policy & Procedures	Drafting & Design	Business & Office Occupations	Advisory Committee
MAY	Planning Meeting	Initiated Gathering Data	Task Force Workshop #1 R Initiate Writing	Task Force Workshop #1 R Initiate Writing	
JUNE			Task Force Meeting C (objectives)	Task Force Meeting C	
JULY			Task Force C Meeting	Task Force C Meeting	
AUGUST			Task Force C Meeting	Task Force C Meeting	
SEPTEMBER	Progress Report Meeting		No Task Force -----Committee Meeting------		
OCTOBER			Task Force Workshop #2 R Initiate Test Writing	Task Force Workshop #2 R Initiate Test Writing	
NOVEMBER			Task Force Meeting R Complete Drafts	Task Force Meeting R Complete Drafts	
DECEMBER	Progress Report Meeting, Review of Documents, Planning	Draft Completed	No Task Force ----Committee Meetings----		
JANUARY 1982		Draft Rewrite	Task Force Draft Rewrite R	Task Force Draft Rewrite R	Advisory Committee "Draft Review" and Input"
FEBRUARY	Meeting to Accept and Implement Articulation Guide	Initial Policy and Procedures	Task Force Receive S Articulation R Guide	Task Force Receive S Articulation R Guide	

Codes - Task Force Committees: R = Release Time, S = Stipend Time

25

BUSINESS AND OFFICE EDUCATION
TASK FORCE COMMITTE PARTICIPATION
SUMMARY

	May, 1981	June	July	August	September	October	November	December	January, 1982	February	Total hours Committee	Estimated Outside hours
Donaldson Vocational Center	+	+	+	+	-	+	+				36	12
Enoree Vocational Center	-	-	-	-	-	-	-				-	
Foothills Vocational Center	*	*	*	o	-	-	+				6	2
Golden Strip Vocational Center		-	-	-	-	-	-				-	
Berea High School	+	o	o	o	-	+	+				18	6
Blue Ridge High School	+	+	+	+	-	+	+				36	12
Carolina High School	+	o	o	o	-	o	+				12	4
Eastside High School	o	+	+	o	-	+	+				24	8
Greenville High School	*	+	+	+		+	*				24	8
Greer High School	+	+	+	+	-	+	+				36	12
Hillcrest High School	+	+	+	+	-	+	+				36	12
J. L. Mann High School	*	o	o	o	-	o	o				o	
Mauldin High School	+	o	o	o	-	+	+				18	6
Parker High School	o	o	o	o	-	+	+				12	4
Riverside High School	+	+	+	+	-	+	+				36	12
Southside High School	+	+	+	+	-	+	*				30	10
Travelers Rest High School	+	+	+	+	-	+	+				36	12
Wade Hampton High School	o	o	o	o	-	o	o				o	
Woodmont High School	+	+	+	+	-	+	+				36	12
											396	137
Greenville TEC	+	*	*	*		*	*					
Approximate Participation: %	60	50	50	50		72	72					

CODE:

Not applicable	-
Participated	+
No Participation	o
Conflict	*

Secondary participation was by 16 different Business and Office Education teachers representing 13 of the 15 high schools and 2 vocational centers with office education programs. Post-secondary participation was by the Chairman, Secretarial Science Department, Greenville Technical College. Secondary participation in committee meetings/workshops was approximately 396 hours total. Post-secondary participation was approximately 4 hours. Total committee time to produce the Typewriting, Shorthand, Accounting, Office Procedures, and Business English Guides was approximately 400 hours. Outside preparation and work by secondary participants is estimated to have involved at least 137 hours. Outside post-secondary preparation is estimated to be 4 hours. It is possible that more time than is estimated was invested in the development of the instruction guides. The program coordinator's time has not been included in the estimate.

INTRODUCTION TO SECONDARY AND POST-SECONDARY SIMILAR PROGRAMS OF TRAINING

BUSINESS AND OFFICE EDUCATION

(Secondary Level)

For the purpose of this articulation program, the Business and Office Education program clusters at the secondary level in The School District of Greenville County includes Stenographic, Clerical, and Accounting Programs. The Cooperative Office Education program may include any one of the forementioned clusters. Business and Office Education clusters not mentioned are beyond the scope of the initial vocational articulation project.

Stenographic

Graduates of the Stenographic Program are prepared to take notes in the shorthand code, the process of recording information in symbols, and use these notes to type business letters and documents. Medical, legal, and technical offices are typical work settings. Typically, the stenographic graduate has a good background in English grammar. Required courses for the Stenographic Program are:

Typewriting I
Shorthand I
Shorthand II
Office Procedures

A sound English background is relevant to success in the Stenographic Program.

Clerical

Graduates of the Clerical Program are prepared to seek entry-level employment as a file clerk, receptionist, shipping clerk, typist, or in another clerical related job. Required courses for the Clerical Program are:

Typewriting I
Typewriting II
Accounting I or Recordkeeping I
Office Procedures

Accounting

Completing the Accounting Program qualifies the individual for entry into accounting, bookkeeping, payroll work, or related jobs dealing

with the financial records of businesses. Required courses for the Accounting program are:

Typewriting I
Accounting I
Accounting II
Office Procedures

Cooperative Office Education

Graduates of the Cooperative Office Education Program have worked part time in office related jobs as a part of their vocational training. Cooperative students enroll in Co-op I during their junior year to prepare for senior work experience training. The student studies office activities including filing, office-style typewriting, office machines, and telephone procedures. Upon successfully completing Co-op I, students may enter Co-op II during their senior year. Co-op II is a two-period class per day in which students continue their study of office related subjects. The students attend classes during the morning and work in offices during the afternoon. Before entering Co-op I, students must complete Typewriting I and be enrolled in one of the office occupations clusters. Students completing the Cooperative Office Education Program receive the following high school credits:

Co-op I	1 Credit
Co-op II	2 Credits
On-job Training	1 Credit for a minimum of 300 hours of work, scheduled weekly throughout the school year

SECRETARIAL SCIENCE

(Post-secondary Level)

The Secretarial Science Program at Greenville Technical College is designed to prepare students for general secretarial and clerical positions with the opportunity to take specialized courses in the Executive, Medical, and Legal areas. There are six programs of study in the curriculum for the purpose of the Vocational Articulaton Program, the AAS Degree in Business with a Major in Secretarial Science has been outlined to illustate the articulated courses for which a student who has completed a similar program of training at the secondary level and who has proven mastery of articulated knowledge and skills standards may receive advanced standing.

For students continuing their Business and Office Occupations training beyond the secondary level and electing to enroll in one of the other (other than the AAS Degree with Secretarial Science Major) post-secondary Secretarial Science Program, it is possible to exempt the same courses as marked with an asterisk in the AAS Degree - Secretarial Science Program, if the students meets the same requirements.

Greenville Technical College, in the 1980-1981 Catalog of the Business Division (p. 31), specifies:

> "Because placement tests are given for many secretarial courses, students who have taken secretarial courses prior to entering the program may enter at their present skill level. Therefore, they are not required to repeat skills already acquired."

AAS Degree Program

The Greenville Technical College Associate in Applied Science Degree in Business with a major in Secretarial Science is a two-year or six quarter post-secondary level program. Upon completing four quarters of the program, the student qualifies for the Stenographic Diploma.

The suggested sequence of required courses for the Associate in Applied Science Degree in Business with Secretarial Science Major includes the following courses.

AAS Degree - Stenographic Diploma

FRESHMAN YEAR

		Credits
Fall Quarter		
*SSC 152	Typing I	4.5
*SSC 161	Shorthand Theory I	4.5
*SSC 119	Filing	3
ENG 151	Language Applications I	3
MAT 129	Math of Business I	3
Winter Quarter		
*SSC 154	Typing II	4.5
*SSC 162	Shorthand Theory II	4.5
*SSC 165	Application of Office Language Skills	4.5
*SSC 176	Secretarial Accounting	4.5
Spring Quarter		
*SSC 159	Typing III	4.5
*SSC 163	Shorthand Theory III	4.5
SSC 132	Clerical Office Procedures I	4.5
ECO 200	Basic Economic Principles	4.5

SOPHOMORE YEAR

Fall Quarter		
*SSC 202	Typing IV	4.5
*SSC 206	Shorthand Theory IV	4.5
*SSC 172	Machine Transcription I	4.5
PSY 152	Applied Psychology	4.5
Winter Quarter		
ENG 131	Vocational Communications	3
SSC 208	Advanced Dictation and Transcription	4.5
PSY 140	Introduction to Psychology	4.5
_____	Required Electives	3
Spring Quarter		
SSC 166	Office Practices I	4.5
ENG 232	Business & Technical Writing	3
_____	Required Electives	9
Elective Courses		
SSC 133	Office Machines I	3
SSC 118	Personal Development	3
SSC 115	Typing Lab	3
SSC 179	Office Machines II	4.5

Other elective courses have been omitted because they appear to have no similar equivalent at the secondary level.

Graduates of secondary level programs in Office and Business Education who continue their vocational training at the post-secondary level and who demonstrate mastery of the knowledge and skills standards of the post-secondary level courses marked with an asterisk may be awarded credit for those courses.

SCOPE OF THE PROGRAM
BUSINESS AND OFFICE EDUCATION
FIRST YEAR

For the initial year of the program, Business and Office Education was identified as one of the training areas to be articulated. Since Business and Office Education at the secondary level represented a broad scope of courses such as typewriting, shorthand, and much more, it was essential to narrow the scope of the initial articulation efforts to coincide with similar training offered at the post-secondary level of training and to fit within the time frame of the program.

Although articulation planning meetings had been conducted previously, the articulation program was not initiated until March, 1981. The program coordinator began duties in mid-March and committee meetings were held for the first time in May.

Because of a possibility that funding by the South Carolina Appalachian Council of Governments might not be continued due to 1981-82 federal economic curtailments and because the project was initiated during the latter months of the 1980-81 school year, it was decided to compact the initial activities of the program into less time than typically might have been allocated. February, 1982, was selected as the deadline date for the articulated, performance-based instruction objectives guides to be completed since that date represented the conclusion of the initial year of funding.

With the deadline of February, 1982, for the product development phase of the program, articulation activities were directed toward very similar vocational training courses in which the post-secondary institution was prepared to grant advanced standing based on the student successfully completing training at the secondary level and passing an exemption (competency) test.

With additional time, using the experiences gained from the pilot program, the Business and Office Education instructors at the secondary and post-secondary levels, with the assistance of administrators or curriculum specialists, should be prepared to continue articulation efforts and expand advanced standing programs when additional training programs are identified in the future.

SCOPE OF PROJECT
BUSINESS AND OFFICE EDUCATION
FIRST YEAR

Secondary Level (Year or semester system)	Post-Secondary Level (Quarter system)
TYPING	
Typewriting I	SSC 152 Typing I
Typewriting II	SSC 154 Typing II
	SSC 159 Typing III
	SSC 202 Typing IV
SHORTHAND	
Shorthand I	SSC 161 Shorthand I
Shorthand II	SSC 162 Shorthand II
	SSC 163 Shorthand III
	SSC 206 Shorthand IV
FILING	
Office Procedures*	SSC 119 Filing
TRANSCRIPTION	
Office Procedures*	SSC 172 Machine Transcription
ACCOUNTING	
Accounting I	SSC 176 Secretarial Accounting
Accounting II	
BUSINESS LANGUAGE	
Business English	SSC 165 Application of Office Language Skills

Unless otherwise specified, secondary level courses are based on the school year (180 days) system, with the exception of office practices, which may be either on the school year or semester system, and post-secondary level courses which are based on the quarter system.

*Office procedures may be on the school year or semester system. The content of office procedures at the secondary level may be similar to several quarter courses at the post-secondary level. Office Procedures taught at the post-secondary level is NOT considered a similar program by the post-secondary institution at present.

MODULE DESIGNATIONS
BUSINESS AND OFFICE EDUCATIONS

The following are the module designations for the initial business and office education courses included in the articulated instruction objectives guide.

Typewriting I	Module 1.0
Typewriting II	Module 2.0
Shorthand I	Module 3.0
Shorthand II	Module 4.0
Accounting I	Module 5.0
Accounting II	Module 6.0
Office Procedures	Module 7.0
Business English	Module 8.0

Additional business and office education courses that may be articulated in the future should begin module designation with module number 9.0.

RECOMMENDATIONS

In future articulation activities in Business and Office Education at the secondary level, consideration should be given to developing articulated, performance-based curriculum guides for Recordkeeping I and II and Office Machines, if these courses continue to be taught at the secondary level and if similar vocational training programs are found at the post-secondary level.

As the secondary level Business and Office Education programs expand to include Word Processing, consideration should be given to articulating that training with similar post-secondary level training.

Accounting I and II at the secondary level have been articulated with Secretarial Accounting at the post-secondary level. Accounting I and II typically will exceed Secretarial Accounting in content. Accounting I and II should be articulated with similar accounting courses in the Accounting Major Program of the Business Technology Division at the post-secondary level. Further articulation of accounting should involve a minimum of coordination and instructor participation time since the secondary level program has been described already.

The articulated, performance-based instruction guide and modules that have been developed must be field trial tested and revised to ensure that performance objectives, performance actions, standards, and outcome-referenced measures are valid. The modules must be evaluated and revised on a regular basis to ensure that they are appropriate for training students for entry level job qualification.

Evaluation of the articulated instruction guide by the secondary and post-secondary level task force participants should occur at a minimum of every two years after the field trial year.